Monroe Township Landfill

New Jersey

EPA ID#: NJD980505671

EPA REGION 2

Congressional District(s): 12

Middlesex

Monroe

NPL LISTING HISTORY Proposed Date: 12/1/1982 Final Date: 9/1/1983 Deletion Date: 2/3/1994

Site Description

The 86-acre Monroe Township Landfill was first operated by Monroe Township in 1955, leased to the Princeton Disposal Co. in 1968, and finally acquired by Browning-Ferris Industries, Inc. of South Jersey (BFI) in 1972. The New Jersey Department of Environmental Protection (NJDEP) ordered it closed in 1978 after liquids seeping from the landfill overflowed into a nearby street, which prompted the abandonment of a housing construction project. The leachate was also found to be contaminating streams that drain the landfill area. Analysis showed the liquids contained volatile organic compounds (VOCs). The State sampled six drinking water wells near the site in 1979 and found varying concentrations of VOCs. One well was closed, which prompted more investigative sampling. Although the next round of analysis showed considerably lower concentrations of pollutants, municipal water lines were provided to some area residents in 1979 and 1980. A cut-off wall and leachate collection drain were installed in 1980. The collected leachate was recycled to the landfill. Approximately 11,500 people are served by private and public wells in the vicinity. Ground water also is used for irrigation. The closest residence is about 50 feet from the site.

Site Responsibility: This site is being addressed through Federal, State and potentially responsible party actions.

Threat and Contaminants

On-site ground water was contaminated with phenols and VOCs. The on-site landfill leachate contains VOCs

Cleanup Approach

This site has been addressed in two long-term remedial phases focusing on source control and groundwater cleanup.

Response Action Status

Source Control: Municipal water lines were hooked up to some residences in 1979 and 1980. In 1979, the State ordered the owner to undertake landfill closure and install a leachate collection and treatment system. Phase I of the closure, completed in 1980, addressed the emergency situation at the northeastern section of the landfill. Workers built a compacted clay dike and leachate collection system. Phase II addressed cleanup efforts and closure of the entire area. This phase was completed in 1984 and activities included: (1) installing a leachate cut-off wall of varying depths around the landfill perimeter; (2) building an underground leachate collection drain; (3) temporarily discharging leachate into the sewer for treatment at the public wastewater treatment facility; (4) installing a clay cover to reduce the spread of contaminants; and (5) installing leachate seep collectors to channel liquid that might pool on the surface of the fill. The leachate is discharged to the Middlesex County Sewage Authority's Old Bridge Sewage Treatment Plant. The State also ordered BFI to decommission the existing leachate lagoon, replace it with an underground storage tank, install a standby generator to handle leachate collection in case of a power failure, and install a fence around the site. These actions were completed in the Fall of 1991. BFI has also developed a contingency plan for leachate disposal in case of emergency.

Ground Water: BFI conducted a hydrogeologic study in 1987 that was intended to assess the current and past effects of the landfill on ground water in the vicinity. BFI installed a series of monitoring wells and began quarterly sampling at that time. The data indicated that an additional hydrogeologic investigation was needed to determine off-site contamination. A remedial investigation regarding off-site contamination was completed in January 1992. This investigation indicated that site-related contaminants would not impact off-site wells.

Site Facts: In 1979, NJDEP and BFI signed a Consent Order requiring landfill closure and cleanup measures. A 1986

Administrative Order on Consent between the NJDEP and BFI superseded the 1979 order and established post-closure activities.

Cleanup Progress

The following remedial measures have been implemented by the PRPs:

- installation of a 7,000-foot long compacted clay cutoff wall circumscribing most of the site;
- construction and operation of a leachate collection and storage system which discharges approximately 6,000 to 7,000 gallons of leachate per day, to a Publicly Owned Treatment Facility under a New Jersey Pollutant Discharge Elimination System permit; and
- construction of a clay cap covering the northern portion of the landfill and a soil cap covering the remainder of the landfill.

These actions have greatly reduced the potential for exposure to hazardous wastes at the Monroe Township Landfill site. A Record of Decision, which called for no further action with monitoring, was signed on April 23, 1993. The site was deleted from the National Priorities List on February 3, 1994. In 2000, EPA performed the five-year review of the site, and determined that the remedy was still protective. EPA's second five-year review of the site was released in April 2005.

Site Repositories

USEPA Records Center 290 Broadway, 18th floor New York, NY 10007 (212) 637-4308